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FISHERIES OF ANGOLA, 1974-76

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CONTENTS

I. Species 1
II. Grounds and seasons 1
III. Catch 1
IV. Utilization 2
A. Human consumption 2
B. Industrial production 3
V. Companies 3
A. Mocamedes 3
B. Porto Alexandre 4
C. Beiramar 4
D. Baia Farta 4
E. Luanda 4
VI. Trade 4
VII. Foreign fishing 5
VIII. Foreign assistance 6
IX. Future plans and outlook 7
Acknowledgments 8
References 8
Appendices 9-14

ABSTRACT

The Angolan fishing industry has been severely impaired by the civil war and flight of most of the country's skilled technicians. The catch has fallen from nearly 600,000 metric tons (t) in 1972 to less than 200,000 t in 1975. Angola has extended its fisheries jurisdiction to 200 miles and excluded all foreign fishermen except the Soviets, Cubans, and perhaps some Eastern European nations. The country's own fishermen, because of a lack of vessels and training, however, are currently unable to catch the fish previously caught by the Spanish, Japanese, and other foreign fishermen who operated off Angola. The Central Committee of Angola's Popular Movement for the Liberation of Angola has assigned priority to the rebuilding of the country's fishing industry.

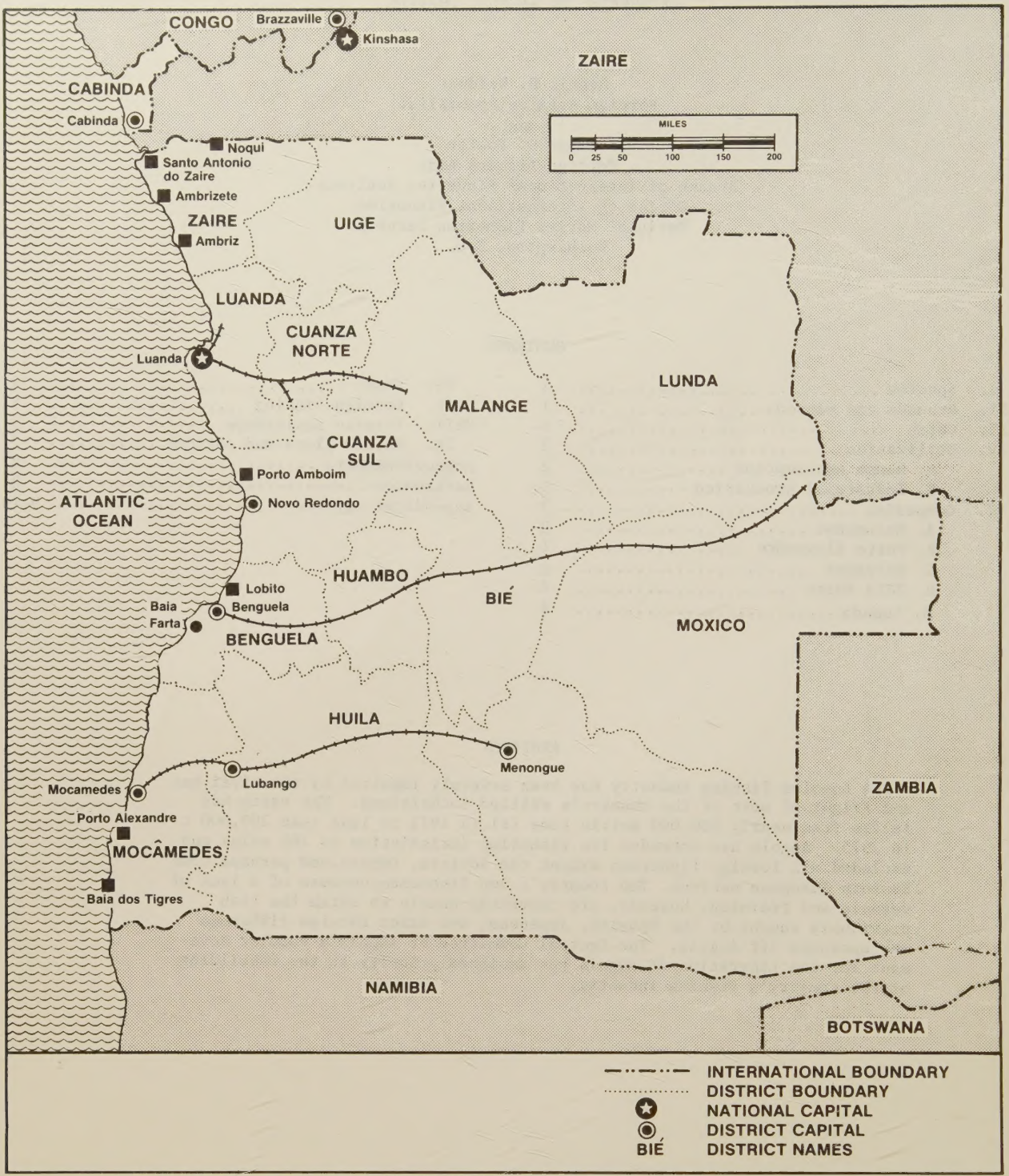


Figure 1.--Map of Angola

1. SPECIES

The species of fish caught in Angolan waters are similar to those caught off South Africa,[1] except for South Africa's catches of hake, as the warmer Angolan waters do not provide a suitable habitat for this species. Over half of the yearly Angolan landings are usually composed of sardinella (S. aurita and S. eba) and Cunene horse mackerel (Trachurus trachurus trecae). Anchovy (Engraulis hepsetus) and pilchard (Sardinops ocellata) are also caught in significant amounts. Other species of commercial importance are jack (Caranx spp.), large-eye dentex (Dentex macrophthalmus), and frigate mackerel (Auxis thazard). Several species of tuna, including bluefin[2] (Thunnus thynnus), little (Euthynnus alletteratus), and skipjack (E. pelamis) are also found in Angolan waters. Small amounts of shrimp are caught off northern Angolan. Recent catches by species are detailed in appendix A.

II. GROUNDS AND SEASONS

Angola's commercial fisheries are concentrated south of Porto Amboim in the Mocamedes and Lobito districts (fig. 1). Catches off these two areas have historically contributed over 90 percent of the total Angolan marine fisheries catch (app. B).

The abundance of fish off Angola is due to two favorable factors: 1) the upwelling of coastal waters associated with the offshore trade winds and 2) the convergence of two ocean currents (fig. 2). The mineral and organic nutrients brought to the surface by the coastal upwelling, the frontal systems generated by the meeting of the Benguela and Guinea Currents, and the nutrient-rich Antarctic waters brought northward by the Benguela current support a concentration of plankton that nourishes the vast fish stocks found off southern Angola. The catches off Angola, however, are lower than those taken off South Africa,because Angola's continental shelf is narrower and because the Benguela Current veers away toward the open ocean halfway along the Angolan coast.

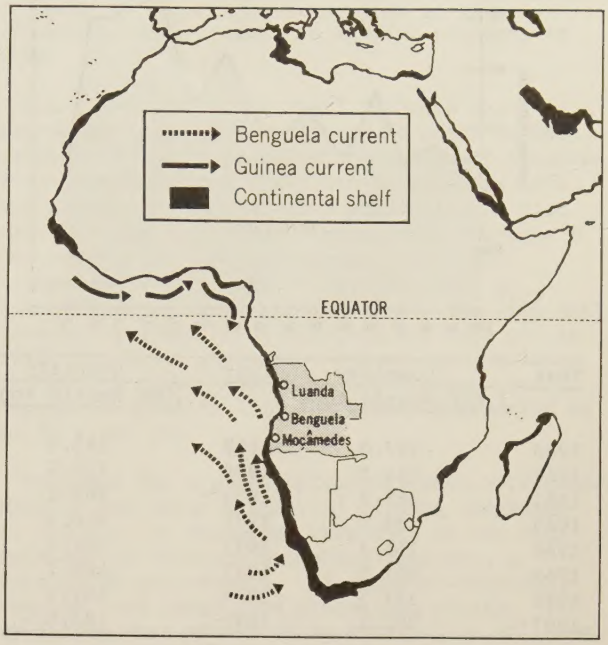


Figure 2.--Map of Africa showing the Benguela and Guinea Currents. (Source: Irene S. Van Dongen, Sea Fisheries and Fish Ports in Angola, Lisbon, 1962, p.7.)

Fishing is conducted throughout the year for most species. Pilchards are somewhat seasonal, being most plentiful during the cooler season from July to October. The tuna fishery generally extends from November to April with peak catches reported in November and December. Tuna catches in 1973, however, were also good in May and June. Shrimp catches tend to be highest during the second half of the year, particularly from July to October.

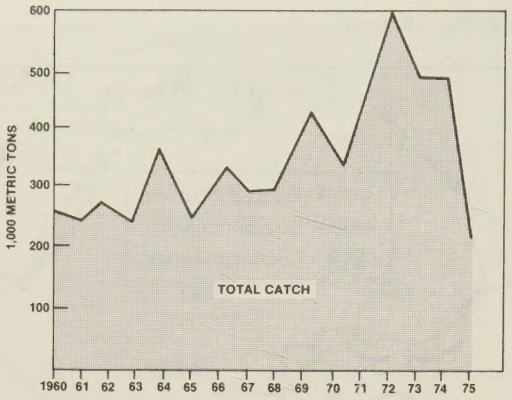
III. CATCH

Angola's record marine catch of nearly 600,000 metric tons (t) was taken in 1972 (fig. 3), and was composed primarily of horse mackerel, sardinella, pilchard, and anchovy (app. A). In 1974, before the civil war, only the Republic of South Africa and Nigeria among African nations caught more fish than Angola, whose 1974 catch amounted to 470,000 t.[3] The disruption caused by the civil war drastically affected the Angolan fishing industry. As a result, catches declined over 60 percent to 184,000 t in 1975, lowering Angola to the position of the sixth most important African fishing nation (table 1).

1/ An article on South African fisheries can be obtained by requesting Foreign Fisheries Leaflet 77-4, "Southern Africa's Fishing Industry, 1975-76" from:
Services Branch, D825
ESIC, NOAA, WSC4
6009 Executive Blvd.
Rockville, MD 20852

2/ FAO reported that 600 metric tons (t) of bluefin tuna were caught in 1973 (app. A), but the International Commission for the Southeast Atlantic Fisheries (ICSEAF) data did not list bluefin as a species caught off Angola.

3/ Freshwater fish are believed to be significant in the diet of the inhabitants of some inland areas, but no statistics or estimates on catch are available.



Year	Quantity	Year	Quantity
	1,000 Metric tons		1,000 Metric tons
1960	252.0	1968	293.4
1961	241.5	1969	417.5
1962	269.3	1970	368.2
1963	239.7	1971	316.3
1964	356.5	1972	599.1
1965	251.5	1973	469.7
1966	327.5	1974	469.7
1967	292.1	1975	183.8

Figure 3.--Angola. Marine fisheries catch, 1960-1975. (Source: FAO. Yearbook of Fishery Statistics, various years.)

Table 1.--Africa. Catch of major fishing nations, 1974-75

Country	Year	
	1974	1975
	1,000 Metric tons	
Republic of South Africa	1,401.0	1,314.7
Nigeria	685.5	506.8
Senegal	357.0*	361.6
Ghana	219.5	254.5
Morocco	288.1	210.4
Angola	469.7*	183.8*
Tanzania	170.9	180.7

* FAO estimate.

Source: FAO. Yearbook of Fishery Statistics, 1975.

Most of the Portuguese captains and technicians who operated the fishing vessels before independence left Angola, and few Angolans have the training to replace them. Fishing vessels were frequently used by refugees to flee the country, and the Popular Movement for the Liberation of Angola (MPLA) is currently seeking the repatriation of these vessels. The Fisheries Minister of the MPLA Government, José Victor de Carvalho, indicated that refugees were responsible for the loss of 820 medium-sized and 3,220 small fishing vessels, mostly artisanal boats. Many of the remaining vessels have been either damaged or lost, or stripped of their valuable radar, sonar, and other navigational gear. Angolan shipyards and dry docks, because of shortages of parts and trained personnel, have been unable to maintain the fishing fleet in working order. Many vessels are tied up in port needing only minor repairs.

The Angolans are currently rebuilding the fishing industry with Cuban and Soviet assistance, and as the civil war is now generally confined to interior provinces in the South, catches probably increased slightly in 1976 despite bad weather which further damaged the fleet. A storm in March 1976 sank 16 vessels in Luanda's fishing port and damaged others. These 16 vessels constituted one-half of the modern commercial fishing fleet left in Luanda, following the extensive fighting which occurred in the city during late 1975.

IV. UTILIZATION

A. Human consumption

Angolan fishery companies produce fresh, frozen, canned, and cured fish (app. C).[4/] Complete statistics on the fisheries output are unavailable. However, fresh and cured fishery products are believed to be the most important commodities for domestic consumption. In 1973, Angolan companies produced 43,000 t of cured fish, most of which was consumed domestically. Cured fish is the most widely used fishery commodity in Angola, much of which is consumed prepared as a popular local food called "fundre." Information on frozen production is unavailable, but export statistics indicate that a significant quantity was processed in 1973 (app. E). A small amount of fish was canned in 1973, mostly for export (app. D and E).

The per capita consumption of fish in Angola was 4.8 kilograms (kg) in 1970. While Angola was one of Africa's major fishing nations, it ranked only fifteenth in per capita consumption of fish. Countries such as Senegal, Congo, Gabon, Ghana, and landlocked Uganda, Chad, and Zambia, had a larger per capita consumption of fishery commodities (app. F). The authors believe that per capita consumption declined sharply in 1975 because of the civil disturbances. Press reports, for example, indicated that only sardines and dried fish were occasionally available in Luanda during 1975. President Agostinho Neto was quoted as saying that there is no fish on the market in Luanda. According to journalist Jack Bourderie, between June and July of 1976 much of Angola's greatly reduced supply of edible fish was being used to feed workers on the country's coffee plantations.[5/]

4/ FAO provides data on catch disposition (app. D), but the utilization statistics differ somewhat from other FAO data (app. C). This discrepancy has not been resolved.

5/ Jack Bourderie, "La Pêche Maritime en Angola", L'Economiste du Tiers Monde, Jan.-Feb. 1977, p. 26.

B. Industrial production

Angola's most important domestically produced fishery commodities are meal and oil. The production of fish meal reached 128,500 t in 1972, but has declined significantly in recent years (app. G). Only a small part (less than 10 percent) of Angola's fish meal is used domestically. Unconfirmed reports indicate that Angola's new Government is interested in producing fish protein concentrate (FPC) so that some of the fish meal now being exported can be used for domestic human consumption.

V. COMPANIES

The MPLA Government nationalized at least 14 foreign-owned fishing companies in June 1976. One of the nationalized companies was the Atlantico company, one of Africa's largest fish canneries, located in the port city of Benguela. Edible fish in all forms is now being marketed through EMPA (Empresa Publica de Abastecimentos), the Government food supply enterprise, which handles fish distribution throughout the country.

A project to set up a Government-controlled company for both fresh and salt-dried fish products is now being studied by the Government. This plan would also include the organization of small-scale fishermen into cooperatives. Under the proposed plan, part of the cooperatives' catch would be consumed by the fishermen and their families, and the surplus would be bought by the Government at a guaranteed fixed price. A portion of the cooperatives' profits could be used to modernize the gear and vessels used by the fishermen.

The present situation in some of Angola's main fishing ports is described below.

A. Mocamedes

Southern Angola was one of the areas most affected by the war, and the plants in Mocamedes, Angola's main fishing port, suffered considerable damage. The local fishing industry is being revitalized under the direction of Cuban and Soviet fishery experts. Production is still well below that of the prewar period. Most of the fish currently being processed is salt-dried, since much of the freezing equipment was damaged during the disturbances in the area. Over 300 commercial vessels operated off southern Angola before 1975, but in early 1977, only 200 were left and of these, only 120 were in working order. This number includes 22 tuna vessels. Press reports indicate that over 4,000 workers were directly employed in the fishing industry in Mocamedes in 1974, and another 5,000 were employed in related industries. Almost all of these workers became unemployed as a result of the departure of most of the factory managers. About 2,500 workers have been reemployed as of early 1977, and their number is reportedly increasing. These companies are slowly being put back into working order by the MPLA Government. Some of the work of restoring the fishing industry is reportedly being done by groups of volunteers as is common in similar projects in Cuba.

The situation at the small Projeque plant in Mocamedes is an example of developments in the south. The owner of the plant was found murdered in a sand dune near the plant in February 1976, and production ceased. The production of fish and fish meal has since resumed. Of Projeque's two commercial fishing vessels, one is in operation with a crew of 32; the other is immobilized by technical problems. The fish meal processing plant is operational, but fish oil is still not being produced. Projeque's 100 longshoremen are handling about 8 t of fish daily, though the plant's full potential is reported to be 50 t per day.

Projeque was a small, privately owned enterprise. Many of the other industrial fishing companies in the port of Mocamedes were part of the huge holdings of Venancio Guimaraes Sobrinho, a Portuguese businessman. He owned plantations, ranches, and large food processing plants. It is likely that all of these enterprises will now come under Government control.

In July 1976, the catch off Mocamedes District was reportedly only 3,500 t, significantly below the full capacity of the local processing plants. The average monthly catch before the civil war varied between 15,000 t and 30,000 t (app. B). There were over 100 plants in the District of Mocamedes, most of which produced fish meal and oil or salt-dried fish. In early 1977, only a small number of these plants were still operating. Over half of the District's catch is now consumed fresh locally. About 25 percent is frozen, and 15 percent is salt-dried. Small amounts of fish are also canned or reduced to fish meal. Some of the production is shipped to Luanda by boat and transported by land to Lubango in Huila District.

While some fish is being shipped to Lubango, about 150 km east of Mocamedes, few other interior cities are receiving fish shipments. Angola's land transportation system was particularly disrupted by the civil war. Many trucks were used by the Portuguese to leave Angola or were destroyed in the hostilities. MPLA Minister Carvalho stated that only 10 percent of Angola's truck fleet remained in the country after the civil war disturbances of 1975-76.6/ In addition, few Angolans had been trained to drive trucks, and press reports indicate that the Cubans have

6/ To rectify this situation, the MPLA placed an order with Brazilian companies for $8 million worth of buses. Additional trucks are also being imported from Sweden, Italy, Yugoslavia, and the Soviet Union. "Angola: Business Queues on the Doorstep," African Development, June 1976, p.620.

had to supply drivers for buses and trucks. Commercial highway traffic between some Angolan cities no longer exists. These problems, in addition to the inadequate road system, the lack of refrigerated transport (there are only two refrigerated trucks in all of Mocamedes District), and declining catches, have effectively prevented the distribution of marine fish to interior cities.

B. Porto Alexandre

At Porto Alexandre, south of the city of Mocamedes (fig. 1), the fishing industry is slowly resuming activity. Two companies are now producing salt for use in the processing of salt-dried fish, and this has enabled 13 companies to resume production of this commodity. A total of three plants are canning fish, two freezing plants have gone back into operation, and one plant is now reducing fish for meal and oil. Over 2,000 workers are now employed in the port's fishing industry.

C. Beiramar

In Beiramar, near Benguela (fig. 1), a tuna plant is back in production. The plant produces 3-4 t of canned tuna daily, although before the war, during the tuna season in September through December, the factory produced 25 t daily and employed nearly 300 people. The canned tuna is now being sold at a price set by the Government, which is slightly above the cost of production.

D. Baia Farta

At the FRIFAR (Entreposto Frigorifico da Baia Farta) plant near Benguela (fig. 1), the refrigeration equipment is still operating and can freeze 24 t of fish every 8 hours. To compensate for the declining catches of Angola's fleet, the company will reportedly receive shipments of fish from Soviet factory trawlers. According to press reports, Soviet vessels landed 20,000 t of fish in Angola during 1976. It is not known where the fish were actually landed, but it is believed that at least some of the Soviet landings were supplied to processing plants in Baia Farta.

E. Luanda

Luanda is the major fishing port along the northern coast and is the primary source of fish for Angola's six northern districts. In early 1977, two ice plants and an unknown number of fishing companies were in operation under Government control. A large part of the now-reduced catch is distributed through the eight wholesale centers in the city of Luanda. Little is currently available for distribution to interior cities.7/

7/ Jorge Julio Gonzalez, "Desde Angola: Apuntes Sobre una Zona Pesquera," Mar y Pesca, February 1977, p.22.

Before the civil war, there were five shipyards in Luanda. During the 1975-76 hostilities the owners of these shipyards left the country. The yards were then taken over by the workers, although little work was possible as most of the Portuguese technicians had left the country. In August 1976, the MPLA Government nationalized these shipyards. It is now believed that these yards have at least partially resumed operations, perhaps with Cuban assistance.

VI. TRADE

Fishery commodities were Angola's third most important export commodity in 1973, the last year for which data are available. Only oil and coffee earned larger amounts of foreign exchange (table 2).

Table 2.--Angola. Value of export commodities, 1971-73

Commodity	Year		
	1971	1972	1973
	--Millions of escudos--		
Oil	2,157	3,535	5,755
Coffee	4,026	3,835	5,162
Fishery products	494	961	1,249
Iron ore	1,187	1,012	1,211
Diamonds	1,523	1,583	1,200

Source: Angolan Government statistics, cited in L'Economiste du Tiers Monde, Jan.-Feb. 1977, p. 26.

Angolan fishery exports totaled 163,000 t, worth almost $53 million in 1973. The two most valuable commodities were frozen fish and fish meal (app. E). More recent data indicate that fish meal production and exports in 1975 were well below the 1972-73 levels (app. G).

Angola exported almost 3,000 t of fishery products worth $1.6 million to the United States in 1975. The primary commodity was frozen tuna (app. H). Since the end of 1975, exports to the United States have ceased.

Angola has traditionally imported small amounts of fish. In 1973, the last year for which data are available, imports totaled $5.5 million, over 85 percent of which were cured fish (app. I). The Soviets reportedly landed 20,000 t of fish in 1976. An agreement with the Soviet Union in March 1977 provides for Soviet vessels to land additional fresh and frozen fish in Angola. Reportedly, 12 percent of the Soviet catch off Angola will be landed in Angolan ports. It is not known whether these shipments are considered imports by the Angolan Government, since the fish is caught in Angolan-claimed waters. Recent reports indicate that Angola is importing cured fish ("klipfish") from Norway. About 2,000 t, processed from ling has been shipped from

Aalesund to Luanda. Another consignment of 500 t was to have been shipped in May 1977. Norwegian companies report Angolan orders of an additional 3,000 t to be processed from cod and saithe.8/

VII. FOREIGN FISHING

Foreign fleets operate mainly off the southern coast of Angola in competition with Angolan marine fishermen who also center their operations on the same grounds. Foreign fishermen caught 411,000 t9/ in ICSEAF divisions 1.1, 1.2, and 1.310/ in 1975 (app. K and fig. 4). The Soviet Union caught 45 percent of the total catch in those three divisions, primarily hake and Cape horse mackerel (app. L and fig. 5). Significant catches were also reported by Bulgaria, Cuba, Ghana, Japan, Poland, and Spain. Almost all of the foreign catch was taken in division 1.3 off southern Angola and northern Namibia (app. K).

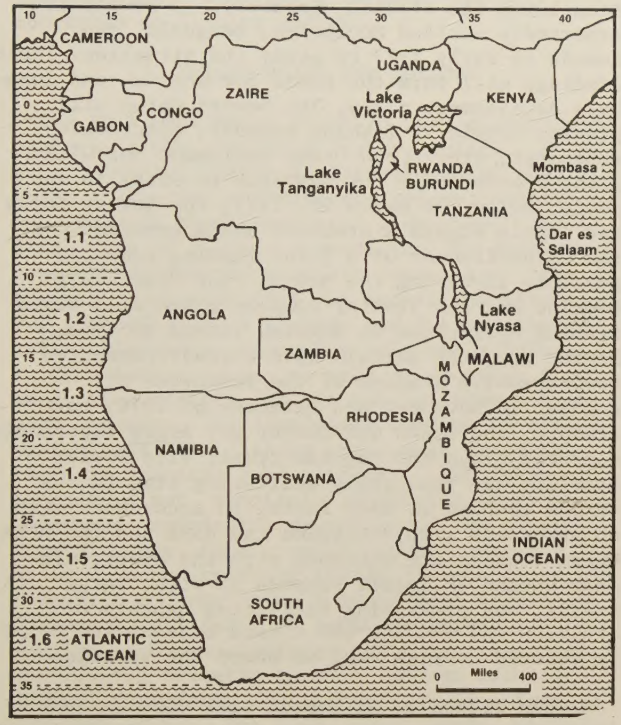


Figure 4.--Map of ICSEAF Western Coastal Subarea 1.

While Angolan marine catches declined substantially in 1975 (app. A), the total catch of foreign fleets operating off Angola increased by over 50 percent. The Soviet catch in these waters rose nearly 60 percent, from 170,000 t (app. J) in 1974 to 270,000 t in 1975 (app. K). Almost all of this catch was taken in division 1.3 (fig. 4). Japan's catch in division 1.1 off northern Angola increased significantly, as did the South African catch in division 1.3. The Ghanaian fleet moved its operations northward from division 1.3 to 1.2 (app. J and K).

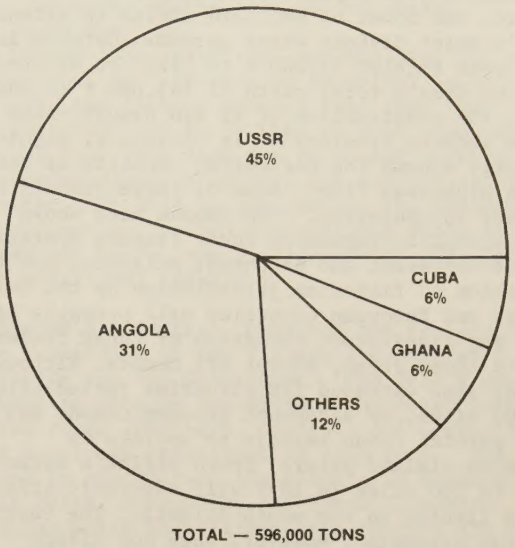


Figure 5.--Percentage of total catch in ICSEAF divisions 1.1, 1.2, and 1.3 by country, 1975.

The MPLA Government established a 200-mile exclusive economic zone (EEZ) in early 1976. The Angolan Fisheries Minister, Carvalho, announced in April 1976 that fisheries cooperation agreements would be signed with Cuba and the USSR. Unconfirmed reports indicate that the Cuban Government has been granted fishing licenses to operate in Angola-claimed waters. An article in a Japanese newspaper indicated that a Japanese fleet, which used to operate out of Luanda and was moved to Cape Town, South Africa, during the 1975-76 hostilities, no longer operates in Angolan waters because its captains feared Cuban gunboats reportedly patrolling the area.11/ Reports from Spain indicate that a Spanish fleet, which in 1974 amounted to 45 vessels, has also withdrawn from Angolan waters after at least 3 Spanish vessels, the Señorita, Clesa IV and Onubense III were seized. Ghana has also withdrawn its fleet. Spain, Ghana, and Italy have expressed a desire to negotiate with Angola for fishing rights. The MPLA response to their initiatives is unknown.

8/ "Nigeria Cuts Big Stockfish Order," Fishing News International, June 1977.

9/ This figure does not include catches taken by the Portuguese fleet.

10/ These divisions of subarea 1 cover the entire coast of Zaire, Angola, and northern Namibia.

11/ Minato Shinbun, March 3, 1976, p. 1.

At a press conference on January 28, 1977, the MPLA's Foreign Minister, Paulo Jorge, made a statement on exclusive fishing rights in Angola's 20-mile territorial and 200-mile jurisdictional waters. He declared that all vessels fishing illegally in Angolan waters would be seized and their catches confiscated, as well as subjected to fines or other penalties. He cited Spain, Zaire, and Japan as flagrant violators, but made no mention of Cuba, the USSR, Bulgaria, Poland, or Ghana.

It is likely that Cuban fishing operations off Angola will expand dramatically in the near future. The coast of southern Africa is already Cuba's major distant water grounds. Catches in this area totaled 73,000 t in 1974, or 44 percent of Cuba's total catch of 165,000 t in that year. The construction of 21 Rio Damuji class stern factory trawlers[12/] in Spain will significantly expand the harvesting capacity of the Cuban high-seas fleet. Some of these vessels are already in operation. The Cubans have shown an interest in expanding their fishing operations in the northwest and northeast Atlantic, but the extension of fisheries jurisdiction by the United States and European countries will probably prevent any significant expansion of Cuban fisheries in those areas, except off Canada. Although Canada also extended its fisheries jurisdiction to 200 miles, an agreement between Canada and Cuba permits Cuban vessels to operate in Canadian-claimed waters. South Africa's extension to 200 miles in 1977 will adversely affect Cuban fishing in the south Atlantic. The South African extension, however, does not affect Namibian coastal waters, where most of the Cuban fishing in the South Atlantic is conducted.

Expanded fishing operations off Angola would thus seem to be of prime economic importance to Cuba and would also correspond to the current political ambitions of the Cuban Government. Press reports already indicate that the new Spanish-built trawlers will be used off the coast of southern Africa. In addition, a Cuban shrimp fleet of Mariel class vessels, which used to operate off Texas, is reportedly taking shrimp off northern Angola, after having been transferred there by the Oceano Atlantico company. Another fleet of 9 or 10 Cuban shrimp trawlers, built in Peru, is also reportedly now based in Angolan ports.

Since November 1976, Luanda has served as a port for East German (GDR) trawlers operating in the South Atlantic. The crews are rotated by air through the port of Luanda. It is not known if the GDR trawlers actually fish in Angolan-claimed waters. As the trawlers enter Angolan waters to exchange crews, it is probable that at least some fishing does take place.

VIII. FOREIGN ASSISTANCE

The MPLA Government announced in April 1976 that cooperation agreements in fisheries would be signed with the USSR and Cuba. An agreement which included fisheries cooperation was signed with the USSR on October 8, 1976, in Moscow during the visit of MPLA President Neto. Press reports indicate that President Neto insisted that Soviet assistance would be paid for and not accepted as a gift. According to TASS, the Angolans will repay part of the Soviet aid "by deliveries of various goods or freely convertible currency over a period of 10 years."[13/]

According to a report prepared by the Congressional Research Service of the Library of Congress, Angola is receiving assistance from the USSR in rebuilding its fishing industry. A Soviet team reportedly visited Mocamedes, Benguela, and Luanda in early 1977 to study the situation. Their findings will form the basis for medium- and long-term development plans. The Soviet Union will provide Angola 10 fishing vessels, electronic equipment, trucks, and other equipment and will grant scholarships for Angolans to study in the Soviet Union. On March 25, 1977, the Soviet Union and Angola signed a protocol which provided for the establishment of a joint fishing company possibly involving the Moscow Fish Processing Combine and the Vivilar Company which will begin fishing operations in Angolan waters in 1978. Soviet research vessels have already conducted comprehensive studies of the resources off Angola. In November and December of 1976, for example, the 3,840 GRT Soviet R/V Argus reportedly operated along the Angolan coast. Five Soviet trawlers are reportedly delivering fish to the FRIFAR company in Baia Farta, in accordance with an agreement signed between the USSR and the MPLA. These vessels are equipped with the electronic gear needed to locate schools of fish, large trawls, and processing facilities capable of freezing and packing 500 t each season. The offal is reduced to fish meal on board the vessels.

Angola signed an agreement with Cuba in July 1976. One of the provisions of the agreement concerned the repair of Angola's remaining fishing vessels and the construction of new ones, especially ferrocement vessels for the shrimp fishery in northern Angola. Cuba has given Angola at least two vessels and a Cuban shipbuilding team is reportedly studying the possibility of using existing Angolan facilities

12/ Rio Damuji class trawlers are 107 m long and 2,635 GRT. They are equipped with 12 freezing tunnels which can process 50 t of fish daily. The vessels have a double trawling system, one trawl can be employed while fish is still being brought aboard by the other trawl. These vessels can also quickly shift back and forth from pelagic to demersal gear.

13/ TASS release, October 14, 1976, cited in the Washington Post, November 3, 1976.

in either Luanda or Benguela to build ferrocement vessels. This would also involve retraining Angolan workers who have previously worked only with wood. The Cubans are also working on research and stock assessment; the Cuban R/V Isla de la Juventud conducted surveys off Angola and Cabinda in September and October 1976. The Cubans have also assisted Angola in the enforcement of its 200-mile zone. A Spanish fishing vessel, the Señorita, was seized in early 1977 by an Angolan vessel reportedly commanded by Cubans. Unconfirmed reports indicate that Cuban gunboats are patrolling Angolan-claimed waters.

Other countries are assisting Angola in rebuilding its fisheries. Poland, for example, is training 150 young Angolans in marine and fishery colleges in Poland. Angola has attempted to lease an entire fleet of purse seiners from Sweden's West Coast Fisheries Central Union, as well as a number of large trawlers, for a 6-month period. No further information on the proposal is available. The MPLA signed an agreement with Italy in August 1977 which provides for technical cooperation between the two countries on fishery matters.

IX. FUTURE PLANS AND OUTLOOK

The MPLA Government plans to make significant changes in the country's fishery policy. Fisheries Minister Victor de Carvalho noted that while Angola was a Portuguese colony, priority was given to export-oriented fisheries. The production of fishery commodities for domestic consumption was of secondary importance. The Minister states in 1976 "We should now direct our potential, both present and future, toward self-sufficiency, exporting only our surpluses in the fishing sector as well as in other food production sectors."[14/] It has not always been easy, however, for developing nations to reduce agricultural and fishery exports in order to increase domestic food supplies. The Cuban example is not atypical While the Castro Government originally deemphasized the production of sugar, Cuba's major export commodity, by 1970 Castro reversed course and mobilized his country's economy in an unsuccessful effort to produce 10 million t of sugar to increase foreign exchange earnings. Cuba has also used its fishing industry to earn foreign exchange. Fisheries products now rank fourth as a foreign exchange earner for Cuba, after sugar, nickel, and tobacco. Most of the country's tuna, shrimp, and lobster is exported. Similarly, Angola may find it necessary in the future to export fishery products to earn foreign exchange even though food shortages exist on the domestic market.

In order to increase the supply of fish on the domestic market, the MPLA has established a state marketing company, EMPA. Prices have been set and training programs initiated to train or retrain fisheries workers. The Government has acknowledged the need for foreign aid in this undertaking and plans to rely on "friendly countries," principally the USSR and Cuba. Minister Carvalho further stated in April 1976 that :

> ...in addition to the lack of technicians and the tremendous slump in real production capacity, and in the number of available fishing boats, the low worker productivity in this sector... results from a lack of discipline verging on anarchy....The lack of fish is often due to a lack of political awareness on the part of our worker comrades. [15/]

To remedy this situation, the Minister has proposed that an "information campaign" be initiated to make the fishery workers feel that they "have an important job to do, and to make them aware of the fact that they are no longer working for a special class or sector, but for the entire country."[16/] This is one reason the Government is attempting to form cooperatives which it will organize, guide, and discipline.[17/] (See page 4 for additional details.)

The MPLA's Central Committee has designated the rebuilding of the fishing industry as a priority for the Government. The MPLA's new fisheries program has divided the coast into three zones (northern, central, and southern) and developed priorities in each zone. The MPLA plans to concentrate its efforts in Benguela, Baia Farta, Mocamedes, and Porto Alexandre. Fishing ports and distribution centers are to be built in Luanda, Benguela, and Mocamedes. Plans also call for raising workers' salaries and continuing the nationalization of the industry. In early 1977, the Government already controlled 80 to 90 percent of all Angolan fishing companies.[18/]

To date, the MPLA Government has received assistance principally from the Soviet Union and Cuba. The MPLA has, however, apparently tried to avoid cutting off the possibility of contacts with the United States and other western nations. President Neto has insisted publicly that all Soviet assistance will be repaid and not accepted as a gift. The MPLA presumably wants to avoid the control which could be associated with dependence on foreign assistance.

The United States does not have diplomatic relations with Angola, although some authorities have recommended that the United States initiate diplomatic and commercial contacts with Angola.

14/ Bourderie, op. cit., p. 26.

15/ Ibid, p. 27.

16/ Bourderie, op. cit., p. 27.

17/ Pêche Maritime, July 1976.

18/ Jorge Julio Gonzales, "Entrevista con Jose Victor de Carvalho, Ministro de la Pesca de la Republica Popular de Angola, Por un Mejor Aprovechamiento de Nuestros Recursos Pesqueros," Mar y Pesca, Feb. 1977, p. 14.

A Library of Congress report states that the United States could compete successfully (with the Soviet Union and Cuba) by offering superior technology, management methods, and know-how.[19]

Following the attempted coup d'etat on May 27, 1977, however, the MPLA Government announced its intention to pursue its economic policies more vigorously than before. President Neto stated that Angola would "socialize everything that can be socialized." Vice-President Lucio Lara further commented, "We are not going to tinker with any kind of capitalism. We are going to make a revolution, Marxist-Leninist, just like we say."[20]

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19/ The Soviet Union and the Third World: A Watershed in Great Power Policy?, Library of Congress, May 8, 1977.

20/ Basil Davidson, "Neto is still riding high (with Cuban safety net)", The Sunday Times, July 3, 1977.

Appendix A.--Angola. Fisheries catch, 1971-75

Species	Year				
	1971	1972	1973	1974	1975
			Metric tons		
Freshwater fish	NA	NA	NA	NA	NA
Tonguefish	100	200	100	100F	100F
Benguela hake	-	100	100	100F	100F
Other gadiformes	-	-	-	-	-
Marine catfish	-	300	-	-	-
Congers	-	100	100	100F	100F
John Dory	100	100	100	100F	100F
Groupers	100	200	200	200F	200F
Sea bass, seaperch	-	100	-	-	-
Grunts	1,000	300	500	500F	500F
Kob	-	100	-	-	-
Croakers, drums	1,700	2,800	900	900F	900F
Striped bream	300	200	200	200F	200F
Red pancora	2,200	1,200	300	300F	300F
Sargo breams	700	300	400	400F	400F
Large-eye dentex	2,600	2,500	1,500	1,500F	1,500F
Black bream	200	300	100	100F	100F
'Pargo' bream	400	600	200	200F	200F
Pogue	200	300	-	-	-
Sea breams	-	-	-	-	-
Picarels	1,200	700	900	900F	900F
Mullets	500	400	400	400F	400F
Threadfins	-	100	100	100F	100F
Bluefish	-	-	-	-	-
Cunene horse mackerel	136,900	270,700	175,000	175,000F	43,750F
Jacks, trevallies	9,300	7,600	7,100	7,100F	7,100F
Leerfish	100	200	400	400F	400F
Round and shortbody sardinellas	86,400	142,100	116,100	116,100F	29,025F
South African pilchard	1,600	72,800	23,300	23,300F	5,825F
Anchovies	4,000	12,800	65,000	65,000F	16,250F
Other clupeoids	100	-	-	-	-
Atlantic bonito	700	600	500	500F	500F
Frigate and bullet tuna	1,300	2,300	1,100	1,100F	1,100F
Little tuna	2,400	1,300	1,000	1,000F	1,000F
Skipjack tuna	NA	NA	NA	NA	NA
Albacore	NA	NA	NA	NA	NA
Southern bluefin tuna	500	600	600	600F	600F
Yellowfin tuna	NA	NA	NA	NA	NA
Silver scabeardfish	3,200	2,300	3,300	3,300F	3,300F
Chub mackerel	9,400	1,400	200	200F	200F
Dogfish	100	100	100	100F	100F
Sawfish	700	200	-	-	-
Skates	100	100	100	100F	100F
Sharks	400	300	300	300F	300F
Other	47,800	72,600	69,500F	69,500F	68,200F
Spiny lobsters	-	-	-	-	-
Shrimps and prawns	-	100	-	-	-
Cuttlefish	-	100	-	-	-
Total	316,300	599,100	469,700F	469,700F	183,850F

NA - Not available
F - FAO estimate
Source: FAO, Yearbook of Fishery Statistics, 1975.

Appendix B.--Angola. Marine fisheries catch, by district, 1968-72

District*	Year				
	1968	1969	1970	1971	1972
	Metric tons				
Cabinda	553	226	285	204	223
Zaire	558	767	880	668	875
Luanda	29,160	37,848	37,321	30,519	39,605
Benguela	108,412	176,604	76,543	93,535	183,982
Mocamedes	154,726	202,005	262,741	191,403	374,424
Total**	293,409	417,450	377,770	316,329	599,109

* District boundaries are detailed in figure 1.
** Totals may not agree due to rounding.
Source: Banco de Angola. Economic Studies Department. Angola: Economic and Financial Survey, 1972, p. 33.

Appendix C.--Angola. Production of fishery commodities, 1970-75

Commodity	Year					
	1970	1971	1972	1973	1974	1975
	1,000 Metric tons					
Edible Products						
Fish						
Fresh	NA	NA	NA	NA	NA	NA
Frozen	NA	NA	NA	NA	NA	NA
Canned*	3.9	3.2	2.6	2.2	NA	NA
Cured	44.0	48.1	49.0	43.0	NA	NA
Shellfish	NA	NA	NA	NA	NA	NA
Nonedible Products						
Fish meal	63.5	51.5	128.5	96.3	63.0	55.2
Fish oil	10.0	9.1	22.4	15.2	NA	NA
Total	NA	NA	NA	NA	NA	NA

* May include a small quantity of other edible products.
Source: FAO. Yearbook of Fishery Statistics, 1975.

Appendix D.--Angola. Disposition of the fisheries catch, 1969-1975

Commodity	Year						
	1969	1970	1971	1972	1973	1974	1975
	-----1,000 Metric tons (live weight)-----						
Edible							
Fresh	20.6	18.8	23.8	28.6	13.2	NA	NA
Frozen	NA	NA	NA	NA	NA	NA	NA
Canned	2.9	2.0	2.0	1.4	2.5	NA	NA
Cured	65.7	90.8	80.1	61.3	36.4	NA	NA
Total*, edible	89.2	111.6	105.9	91.3	52.1	NA	NA
Nonedible	328.3	266.2	210.4	507.8	415.1	NA	NA
Total*	417.5	377.8	316.3	599.1	467.2	NA	NA

* Does not include frozen fish.

Source: FAO. Yearbook of Fishery Statistics, 1975.

Appendix E.--Angola. Fishery exports, by quantity and value, 1970-1975

Commodity	Quantity						Value					
	1970	1971	1972	1973	1974	1975	1970	1971	1972	1973	1974	1975
Edible	---------1,000 Metric tons------						--------US$1 million---------					
Fish												
Frozen	7.9	15.2	31.3	45.1	34.1	NA	1.7	4.0	8.4	14.2	14.2	NA
Canned	3.0	2.4	1.4	1.3	NA	NA	1.7	1.6	0.9	1.3	NA	NA
Cured	13.4	16.0	16.0	8.2	4.3	NA	3.7	4.5	5.1	3.0	2.1	NA
Shellfish												
Frozen	negl.	negl.	0.9	0.4	NA	NA	0.1	0.1	0.9	0.8	NA	NA
Canned	-	-	-	-	NA	NA	-	-	-	-	NA	NA
Nonedible												
Fish meal	62.0	48.0	120.0	90.0	60.3	NA	10.0	7.4	19.5	30.1	19.2	NA
Fish oil	11.7	8.3	19.4	18.0	10.6	NA	2.0	1.4	2.3	3.4	3.2	NA
Total, Exports*	98.0	89.9	189.0	163.0	NA	NA	19.2	18.8	37.1	52.9	NA	NA

* Totals may not agree due to rounding.

Source: FAO. Yearbook of Fishery Statistics, 1975.

Appendix F.--Africa. Per capita fish consumption of 15 selected countries, latest available data

Country	Year	Quantity
		Kilograms
Senegal	1970	15.0
Congo	1964-66	11.3
Gabon	1970	11.0
Ghana	1970	8.6
Uganda	1970	8.4
Sierra Leone	1970	7.7
Chad	1970	7.5
Gambia	1970	7.3
Liberia	1970	7.0
Mauritania	1964-66	6.2
Zambia	1970	5.7
Nigeria	1970	5.6
Cameroon	1970	5.3
Mauritius	1970	5.1
Angola	1970	4.8

Source: U.S. Department of Commerce. NOAA. NMFS. Fisheries of the United States, 1976. Current Fishery Statistics No. 7200, pp. 67-68.

Appendix G.--Angola. Fish meal production, exports, domestic consumption, and stocks, 1970-1975

Fish meal	Year					
	1970	1971	1972	1973	1974	1975
	1,000 Metric tons					
Production	63.5	51.5	128.5	96.3	63.0	55.2
Exports	62.0	48.0	120.0	90.0	60.3	53.7
Domestic consumption	4.0	3.5	4.2	6.2	5.1	2.4
Stocks, ending	2.0	17.0	19.6	14.0	13.3	12.5

Sources: Production and exports - FAO. Yearbook of Fishery Statistics, 1975.
Domestic consumption and stocks - Fishmeal Exporters Country Organization.

Appendix H.--Angola. Fishery exports to the United States, 1974-1976

Commodity	1974		1975		1976	
	Quantity	Value	Quantity	Value	Quantity	Value
	Metric tons	US$1,000	Metric tons	US$1,000	Metric tons	US$1,000
Frozen						
Tuna						
Yellowfin, eviscerated						
Whole	89.0	67.6	15.0	9.2	-	-
Headed	222.0	131.0	56.0	39.8	-	-
Skipjack	900.0	504.0	2,255.5	1,092.7	-	-
Shrimp and prawns (shell-on)	26.8	86.1	-	-	-	-
Canned (not in oil)						
Tuna						
Bonito and yellowtail	4.6	5.3	13.2	17.5	-	-
White meat	56.4	94.1	10.2	18.5	-	-
Other than white meat	365.7	642.7	150.9	233.2	-	-
Other						
Edible	11.3	19.0	-	-	-	-
Nonedible	-	-	414.2	193.9	-	-
Total *	1,675.7	1,549.7	2,915.0	1,604.8	-	-

* Totals may not agree due to rounding.
Source: U.S. Department of Commerce. Bureau of the Census.

Appendix I.--Angola. Fishery imports, by quantity and value, 1970-1975

Commodity	Quantity						Value					
	1970	1971	1972	1973	1974	1975	1970	1971	1972	1973	1974	1975
	-----1,000 Metric tons-----						-----US$1 million-----					
Edible												
Fish												
Frozen	1.0	1.1	0.2	0.2	NA	NA	0.5	0.6	0.2	0.2	NA	NA
Canned	1.0	1.3	0.3	0.7	NA	NA	0.6	0.9	0.3	0.5	NA	NA
Cured	3.3	3.5	2.1	2.6	NA	NA	2.9	3.8	2.9	4.7	NA	NA
Shellfish												
Frozen	0.1	0.1	negl.	negl.	NA	NA	0.1	0.1	0.1	0.1	NA	NA
Canned	negl.	negl.	negl.	negl.	NA	NA	negl.	0.1	negl.	negl.	NA	NA
Nonedible												
Fish meal	negl.	negl.	negl.	negl.	NA	NA	negl.	negl.	negl.	negl.	NA	NA
Fish oil	negl.	negl.	negl.	negl.	NA	NA	negl.	negl.	negl.	negl.	NA	NA
Total, Imports*	5.4	6.0	2.6	3.5	NA	NA	4.2	5.5	3.4	5.5	NA	NA

* Totals may not agree due to rounding.
Source: FAO. Yearbook of Fishery Statistics, 1975.

Appendix J.--Angola. Catch of domestic and foreign fleets in ICSEAF divisions 1.1, 1.2, and 1.3, 1974

Country	ICSEAF divisions*			Total
	1.1	1.2	1.3	
	--------1,000 Metric tons---------			
Angola	NA	NA	NA	470.3
Bulgaria	-	-	2.9	2.9
Cuba	-	-	29.1	29.1
France	-	-	-	-
Ghana	-	-	37.6	37.6
Israel	-	-	-	-
Italy	-	-	-	-
Japan	2.1	1.7	0.5	4.3
Poland	0.2	0.1	13.7	14.0
Portugal	NA	NA	NA	NA
South Africa	-	-	0.7	0.7
Spain	7.6	2.4	-	10.0
USSR	-	-	169.6	169.6
Zaire	1.0	0.7	-	1.7
Other	-	-	-	-
TOTAL	10.9**	5.0**	254.1**	740.3+

* ICSEAF divisions 1.1, 1.2, and 1.3 are delineated in figure 4.
** Does not include Angolan or Portuguese catch.
\+ Does not include Portuguese catch which totals 16,091 t in the entire ICSEAF convention area.
Source: ICSEAF. Statistical Bulletin, Vol. 4, Madrid: March, 1976.

Appendix K.--Angola. Catch of domestic and foreign fleets in ICSEAF divisions 1.1, 1.2, and 1.3, 1975

Country	ICSEAF division*			Total
	1.1	1.2	1.3	
	-----1,000 Metric tons-----			
Angola	4.1	29.9	119.2	153.2**
Bulgaria	-	-	21.1	21.1
Cuba	0.9	0.6	33.9	35.4
France	negl.	-	-	negl.
Ghana	-	35.7	-	35.7
Israel	-	-	-	-
Italy	-	-	-	-
Japan	11.5	3.2	0.5	15.2
Poland	-	-	15.1	15.1
Portugal	NA	NA	NA	NA
South Africa	-	-	6.4	6.4
Spain	7.3	6.9	0.3	14.5
USSR	0.4	0.9	268.5	269.8
Zaire	-	-	-	-
Other	-	-	-	-
Total+	24.1++	77.3++	465.1++	566.4+++

* ICSEAF divisions 1.1, 1.2, and 1.3 are delineated in figure 4.
** Discrepancy with app. A is unexplained.
\+ Totals may not agree due to rounding.
++ Does not include the Portuguese catch.
+++ Does not include Portuguese catch which totals 8,700 t in the entire ICSEAF convention area.
Source: ICSEAF. Statistical Bulletin, Vol. 5, Madrid: March, 1977.

Appendix L.--USSR. Fisheries catch in the Southeast Atlantic, by species and ICSEAF division, 1975

Species	ICSEAF divisions*						Total
	1.1	1.2	1.3	1.4	1.5	1.6	
	- - - - - - - - - - Metric tons - - - - - - - - - -						
Fish							
Demersal							
Flatfish	-	-	16	-			16
Hake	91	534	110,754	74,008	9,271	14,385	209,043
Redfish							
John Dory	75	-	10	1	2	32	120
Sea bass	-	-	76	42	60	144	322
Drums and croakers	-	-	43	8	-	-	51
Large-eye dentex	-	-	7,219	649	171	-	8,039
Sea breams	66	127	279	212	-	3	687
Other	-	-	3,349	2,789	361	317	6,816
Pelagic							
Cape horse mackerel	133	172	137,486	40,214	681	503	179,189
S. African pilchard	-	-	277	88	-	85	450
Tuna-like fish	-	-	-	-	-	-	
Atlantic cutlassfish	-	-	1,372	93	-	1	1,466
Chub mackerel	-	7	2,039	863	71	391	3,371
Sharks and rays	-	-	1,424	728	142	-	2,294
Other	-	59	3,679	3,144	406	358	7,646
Shellfish							
Crustaceans	-	-	-	-	-	-	-
Squid	-	-	496	509	-	134	1,139
Total	365	899	268,519	123,348	11,165	16,353	420,649

* The statistical areas of the International Commission for Southeast Atlantic Fisheries are shown in figure 4.
Source: ICSEAF. Statistical Bulletin, Vol. 5, Madrid: March, 1977.

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